

MATTERS ARISING

The silent suffering women

Jonsson *et al*¹ recently reported on a population-based study to assess the prevalence of lower genital tract symptoms in young women and the association between reported symptoms and past or present signs of STDs.

The study found that the presence of leucocytosis was associated with reported discharge but not with pseudohyphae or clue cells. Vaginal pH was not reported. Definition of vaginal infections based on microscopy of wet smears is inadequate in this setting^{2,3} and, in the absence of vaginal fungal, aerobic and anaerobic culture, the opportunity to find other explanations for the association between discharge and leucocytosis has been missed. Other factors such as the use of chemical irritants, douching, self-medication and recent sexual activity do not appear to have been taken into account nor has participants' stage of menstrual cycle or method of contraception been recorded; the latter is relevant as different methods affect the vaginal flora in different ways.^{4,5}

We would also question the reliability of participants retrospective recall of symptoms during the preceding 6 months and the relevance of previously experienced symptoms to current examination and laboratory findings.

This population-based study may have confirmed the findings of previous authors but appears to have missed the opportunity to further elucidate associations between reported symptoms and the microbiology of the lower genital tract.

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- 1 Jonsson M, Karlsson R, Rylander E, *et al*. The silent suffering woman—a population case study on the association between reported symptoms and past and present infections of the lower genital tract. *Genitourin Med* 1995; 71:158–62.
- 2 McLennan MT, Smith JM, McLennan CE. Diagnosis of fungal mycosis and trichomoniasis. Reliability of cytologic smear, wet smear and culture. *Obstet Gynecol* 1972;40:231–4.
- 3 Hay PE, Taylor-Robinson D, Lamont RF. Diagnosis of bacterial vaginosis in a gynaecology clinic. *Br J Obstet Gynaecol* 1992;99:63–6.
- 4 Soper DE, Brockwell NJ, Dalton HP. Evaluation of the effects of a female condom on the female lower genital tract. *Contraception* 1991;44:21–9.
- 5 Hooton TM, Roberts PL, Stamm WE. Effects of recent sexual activity and use of a diaphragm on the vaginal microflora. *Clin Infect Dis* 1994;19:274–8.

Karlsson replies:

Craig and Talbot have in their letter pointed out that we have missed the opportunity to further elucidate associations between reported symptoms and the microbiology of the lower genital tract. This might well be the case, but it was not the main objective of this study. The aim was, as stated in the introduction, to determine "the prevalence of lower genital tract symptoms and the

association with clinical findings" in a population-based study.

In our opinion, the most important result was the high prevalence of lower genital tract symptoms among "healthy" women in a population-based study. As regards "the reliability of participants retrospective recall", the women's own remembered experience must be considered the "golden standard" with few, if any, "false positives" but certainly some "false negatives", i.e. the actual prevalence could be higher than reported. We have in the article reported numerous clinical findings, regrettably not vaginal pH, and their association with past or present complaints, and we think that it is up to the reader to evaluate whether these findings are sufficient for a definition of "infection".

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Syndromic management of genital ulcer disease—a reply

In a recent letter to the editor Dr Bushan Kumar *et al*¹ expressed concern about the practicality of the genital ulcer disease (GUD) flow chart proposed by WHO for the syndromic management of patients presenting with genital ulceration.² A number of objections are raised which deserve scrutiny and a response. Before addressing the individual objections it is useful to reflect for a moment on the rationale for the syndromic approach and on the flow charts which have been developed for the management of the individual syndromes.

The lack of specificity of signs and symptoms of the various sexually transmitted diseases (STDs) precludes a successful clinical aetiological approach. The absence of simple and rapid laboratory diagnostic tests for most sexually transmitted infections keeps a laboratory confirmed aetiological diagnosis well out of reach of the majority of STD patients, especially in developing countries, where rates of incidence and prevalence are much higher than in industrialised countries. Syndromic management of STD patients is based (1) on the recognition of relatively consistent combinations of signs and symptoms (syndromes) with which STDs commonly present; (2) knowledge of the most common causative organisms for the various syndromes; (3) knowledge of the antimicrobial susceptibility pattern of these organisms; and (4) knowledge of behavioural and demographic characteristics of people with STD. Cure of STD patients is achieved through recognition of the appropriate syndrome, and provision of effective antibiotics against the most important causative organisms. This has proved to be a highly effective approach,^{3,4} which is also cost-effective, depending on the prevalence of the different STDs.^{5,6} An inherent component of patient management is education and counselling for prevention of future infections, including condom use; to ensure compliance; and to ensure partner notification and management.²

Flow charts have been developed to facilitate training in the syndromic approach, and to serve as a reminder for those health care workers who see STD patients only infrequently. The following need to be kept in mind: (1) the flow charts developed by WHO are "generic", and may therefore require adaptation to the particular situation in a country or region; (2) flow charts are further developed as research and validation studies indicate ways to make the approach more sensitive and more specific. Thus, the

flow chart for "vaginal discharge" contained in the above mentioned WHO publication has been adapted to include a "risk assessment" to increase the specificity of the approach.⁷

Implementation of the syndromic approach does indeed require (1) an individual assessment of each case; (2) supervision and guidance of staff; and (3) an appropriate referral mechanism for patients not responding to treatment. These issues are emphasised in the publication referred to earlier² and in the *STD Case Management Training Modules*, currently under final development in WHO.

The above should be kept in mind when considering the concerns raised in relation to the "GUD" flowchart.

1. The lack of specificity of signs and symptoms of the various ulcerative STD is indeed one of the most compelling reasons for the use of the syndromic approach. As the authors point out, differentiation might be impossible *even by the most experienced specialists*. The importance of including all locally relevant causes has already been alluded to above.
2. The frequent occurrence of mixed infections in genital ulcers is a strong argument in favour of a simple flow chart approach to GUD, where treatment is given for the most common causative organisms.
3. The more frequent occurrence of non-GUD related lymphadenopathy in developing countries is of more relevance for the "inguinal swelling" flow chart than for the flow chart dealing with GUD.
4. It is important to keep in mind that the syndromic approach, and therefore the flow charts for each of the syndromes, have been developed to manage symptomatic patients. The detection of an intra-vaginal ulcer on examination (to the extent possible under the social and cultural norms in a society; it may be impossible for male health care workers to examine the vulva and vagina of female patients in some countries) to confirm a vaginal discharge would lead to the application of the "GUD" flow chart. Where examination is not possible, such an intra-vaginal ulcer would obviously not be diagnosed, but it is not clear what the alternative is in such a situation. Management of partners, as indicated above, is part of the syndromic approach, and is mentioned in the flow chart under discussion.
5. As indicated above, a requirement for the application of the syndromic approach is knowledge of the locally relevant causative organisms for a syndrome. If in a particular area the most common causes of genital ulcer are not related to STD, then obviously the flowchart would have to be modified or a decision taken not to apply the syndromic approach. However, the potential for STDs to go untreated, with the concomitant risks of further transmission, long-term complications and increased HIV transmission should be kept in mind.
6. The psychological trauma incurred by diagnosing non-STD as STD should be weighed against the psychological and physical trauma incurred by the long-term complications and sequelae of not treating STD, or ignoring to manage the partners of STD patients. The latter is relatively common even where a confirmed diagnosis has been made.
7. The risk of false labelling of disease is obviously mostly a problem with the clinical-aetiological approach, such as practised by most specialists in the developing world.